

Remarks

The Office Action mailed November 12, 2004 has been carefully reviewed and the foregoing amendment has been made in consequence thereof.

Claims 2-11 are now pending in this application and have been amended herein. Claims 1 and 12-21 are cancelled. It is respectfully submitted that the pending claims define allowable subject matter.

Claims 1 and 12-21 were withdrawn from consideration as directed to a nonelected invention. Accordingly, claims 1 and 12-21 are cancelled herein. The cancellation of claims 1 and 12-21 is without prejudice, and Applicants expressly reserve the right to pursue these claims in continuing or divisional applications.

The objection to the specification is respectfully traversed. The title of the application has been amended as suggested in the Office Action, and the abstract has been revised in light of the elected invention. Accordingly, Applicants request that the objection to the specification be withdrawn.

The objection to claims 3-8 and 10-11 is respectfully traversed. Claims 3-8 and 10-11 have been amended in accordance with the suggestion in the Office Action. Accordingly, Applicants request that the objection to claims 3-8 and 10-11 be withdrawn.

The objections to claims 2-11 under 35 U.S.C. § 112 is respectfully traversed.

Claims 2-11 have been amended for clarity and are believed to overcome the issue noted in the Office Action. Accordingly, Applicants request that the objection to claims 2-11 be withdrawn.

Applicants specifically note the amended claims are not means plus function claims, and Applicants are not attempting, and do not intend, to invoke Section 112, paragraph 6 in any of the pending claims. The claims are believed to recite structure consistent with Applicants' intent the originally filed claims.

The rejection of claims 2-11 under 35 U.S.C. § 102(b) as being anticipated by Resch (U.S. Patent No. 4,503,610) is respectfully traversed.

Claim 2 recites an apparatus for installing pin connectors to a circuit board, said apparatus comprising a pin array, "a support surface defining an engagement area for an application of downward installation force to press fit said pin array to the circuit board, said support surface supporting said pin array during press fit installation to the board" and "an enclosure receiving said support surface; wherein said pin array is at least partially enclosed within said enclosure."

Resch does not describe the apparatus of claim 2. The Office Action cites the pin connector (10) of Resch as corresponding to the support surface and a frame portion (30) of a pressing tool (1) as corresponding to the recited enclosure. As described by Resch, however, the pin connector (10) and the frame portion (30) do not meet the recitations of claim 1.

As described by Resch, connector bodies (11) of the pin connector (10) are arranged and aligned with a circuit board (8) with the connector bodies (10) positioned beneath the circuit board (8). The pressing tool (1) presses contact element combs (2) into and through the circuit board and into the connector bodies (11) in a single operation. Notably, the contact element combs (2) are not supported as they are pressed into the board, and the contact element combs (2) are therefore subject to the problems set forth in the Background of the Invention section of the instant application.

Resch neither describe nor suggest a support surface defining an engagement area for an application of downward installation force to press fit said pin array to the circuit board, said support surface supporting said pin array during press fit installation to the board, and an enclosure receiving said support surface; wherein said pin array is at least partially enclosed within said enclosure as recited in claim 2. The Resch pin connector bodies (11) do not define an engagement area for an application of a downward installation force to press fit the pin array to a circuit board. Rather the Resch pin connector bodies (1a) are situated beneath a circuit board, and the pressing tool (1) applies downward installation force to the contact element combs (2) to install them to the connector bodies (11). The pressing tool (1) and its frame portion (30), which

is cited as the recited enclosure, does not receive the connector bodies (11) and does not meet the recitations of claim 2. Rather, the tool (1) and the connector bodies (11) are located on different sides of the circuit board (8) as the contacts are installed.

Claim 2 is therefore submitted to be patentable over Resch.

Claim 9 recites an apparatus for installing pin connectors comprising “a connector,” “a pin array extending through said connector,” “a header,” and “a support surface” “wherein said connector is matingly engaged with said header, thus forming an enclosure for said pin array, and said support surface encapsulates said pin array and provides for a downward force to be applied from above the pin array.”

Resch does not describe or suggest a support surface encapsulates said pin array and provides for a downward force to be applied from above a pin array. In the Office Action, it is asserted that encapsulation is “old and well known in the art.” The Office Action, however, cites no art in support of this proposition, and Applicants note that the prior art must teach or suggest every recitation of the claimed invention in order to reject the claim. There is no evidence whatsoever on the preset record, except for the unsupported assertion that encapsulation would have been obvious, that the prior art anticipates or renders the invention of claim 9 obvious over the prior art.

Absent a more considered showing of the teaching of the prior art, Applicants respectfully submit that Claim 9 is patentable.

For the reasons set forth above, Applicants request that the Section 102 rejection of claims 2 and 9 be withdrawn.

The rejection of claims 3-7 and 10-11 under 35 U.S.C. § 103(a) as being unpatentable over Resch is respectfully traversed.

Claims 3-7 and 10-11 depend from independent claims 2 and 9, respectively which are submitted to be patentable over Resch for the reasons above. When the recitations of Claims 3-7

and 10-11 are considered in combination with the respective recitations of claim 2 and 9, Applicants submit that dependent claims 3-7 and 10-11 likewise are patentable over Resch.

Furthermore, it is respectfully submitted that a prima facie case of obviousness has not been established. The rejection is based upon an unsupported assertion in the Office Action that certain concepts are "old and well known." No art was cited in the rejection, no supporting affidavits or declarations have been made of record, and the assertion that the invention would have been obvious is respectfully traversed. Absent a more considered showing of teaching of the prior art related to the invention, or credible statements made by a person properly established as a person of ordinary skill in the art at the time that the invention was made, Applicants respectfully submit that the present Section 103 rejection is unsustainable. The art must not only teach the recitations of the claims, but also motivate one of ordinary skill in the art at the time that the invention was made to combine the teaching of the art in a manner which would result in the present invention. The present rejection fails to meet this standard.

For the reasons set forth above, Applicants respectfully request that the Section 103 rejection of claims 3-7 and 10-11 be withdrawn.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully submitted,



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